CS97-110/112

GB 2812

December 11, 1998

To: Commissioner of Patents and Trademarks
Washington, D.C. 20231

Fr: George O. Saile, Reg. No. 19,572
20 McIntosh Drive
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Subject: Serial No. 09/186,388 11/05/98

B.H. Lee, Tang Ying, W.H. Rong, L.T. Hong, Zodig Lam

N TYPE IMPURITY DOPING USING IMPLANTATION OF P_2^+ IONS OR AS_2^+ IONS

Grp. Art Unit: 2812

#3
I. D. S.
F. McCulla
2/19/99

INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation In An Application.

The following Patents and/or Publications are submitted to comply with the duty of disclosure under CFR 1.97-1.99 and 37 CFR 1.56. Copies of each document is included herewith.

S. Wolf et al, "Silicon Processing For The VLSI Era", Vol. 3, Lattice Press, Sunset Beach, CA, 1986, p. 327, discusses ion implantation using doubly charged species.

U.S. Patent 5,155,369 to Current, "Multiple Angle Implants For Shallow Implant", describes a method of using two doses of ions in an ion beam to provide implantation for shallow junction devices.

Sincerely,

Stephen B. Ackerman,
Reg. No. 37761